

1-33 (Cancelled)

34. (Currently Amended) A method for preventing or removing biofilm on a surface, comprising contacting the surface with an effective amount of one or more E.C. 3.5.1 acylases and a carrier to degrade a lactone produced by one or more microorganisms, wherein the degradation of the lactone prevents or removes the biofilm.

35. (Previously Presented) The method of claim 1, wherein the lactone is a homoserine lactone.

36. (Previously Presented) The method of claim 25, wherein the homoserine lactone is an N-acyl-L-homoserine lactone.

37. (Previously Presented) The method of claim 36, wherein the N-acyl-L-homoserine lactone is N-(3-oxododecanoyl)-L-homoserine lactone.

38. (Previously Presented) The method of claim 36, wherein the N-acyl-L-homoserine lactone is N-butyryl-L-homoserine lactone.

39. (Previously Presented) The method of claim 34, wherein the biofilm is comprised of one or more microorganisms selected from the group consisting of an aerobic bacterium, anaerobic bacterium, fungus, algae, and protozoan.

40. (Currently amended) The method of claim 39, wherein the aerobic bacterium is an *Aeromonas*, *Burkholderia* *Burkholderia*, *Escherichia coli*, *Flavobacterium*, *Microbacterium*, *Pseudomonas*, *Salmonella*, or *Staphylococcus* strain.

41. (Previously Presented) The method of claim 39, wherein the anaerobic bacterium is a *Desulfovibrio* strain.

42. (Previously Presented) The method of claim 39, wherein the fungus is a yeast or filamentous fungus.

43. (Previously Presented) The method of claim 42, wherein the yeast is a *Candida* strain.

44. (Previously Presented) The method of claim 34, wherein the surface is a hard, soft, or porous surface.

45. (Previously Presented) The method of claim 34, wherein the acylase is obtained from a plant, animal, or microbial source.

46. (Previously Presented) The method of claim 45, wherein the microbial source is a bacterial or fungal source.

47. (Previously Presented) The method of claim 46, wherein the bacterial source is an *Acetobacter*, *Acinetobacter*, *Agrobacterium*, *Alcaligenes*, *Anthrobacter*, *Azotobacter*, *Bacillus*, *Comamonas*, *Clostridium*, *Gluconobacter*, *Halobacterium*, *Mycobacterium*, *Rhizobium*, *Salmonella*, *Serratia*, *Streptomyces*, *E. coli*, *Pseudomonas*, *Wolinella*, or methylotrophic bacterium strain.

48. (Previously Presented) The method of claim 46, wherein the fungal source is a yeast or filamentous fungus.

49. (Previously Presented) The method of claim 48, wherein the yeast source is a *Candida*, *Kluyveromyces*, *Pichia*, *Saccharomyces*, *Schizosaccharomyces*, or *Yarrowia* strain.

50. (Previously Presented) The method of claim 48, wherein the filamentous fungal source is an *Acremonium*, *Aspergillus*, *Aureobasidium*, *Chrysosporium*, *Cryptococcus*, *Filibasidium*, *Fusarium*, *Humicola*, *Magnaporthe*, *Monilia*, *Mucor*, *Myceliophthora*, *Neocallimastix*, *Neurospora*, *Paecilomyces*, *Penicillium*, *Phanerochaete*, *Piromyces*, *Schizophyllum*, *Sclerotium*, *Sporotrichum*, *Talaromyces*, *Thermoascus*, *Thielavia*, *Tolypocladium*, or *Trichoderma* strain.

51. (Previously Presented) The method of claim 34, wherein the effective concentration of the one or more acylases is about 0.001 to about 1 g of acylase per kilogram of water.

52. (Previously Presented) The method of claim 51, wherein the effective concentration of the one or more acylases is about 0.01 to about 1 g of acylase per kilogram of water.

53. (Previously Presented) The method of claim 52, wherein the effective concentration of the one or more acylases is about 0.01 to about 0.5 g of acylase per kilogram of water.

54. (Previously Presented) The method of claim 53, wherein the effective concentration of the one or more acylases is about 0.01 to about 0.1 g of acylase per kilogram of water.

55. (Previously Presented) The method of claim 34, wherein the one or more acylases have a pH optimum in the range of about 3 to about 10.

56. (Previously Presented) The method of claim 55, wherein the one or more acylases have a pH optimum in the range of about 4 to about 9.

57. (Previously Presented) The method of claim 56, wherein the one or more acylases have a pH optimum in the range of about 5 to about 8.

58. (Previously Presented) The method of claims 34, wherein the one or more acylases have a temperature optimum in the range of about 5°C to about 100°C.

59. (Previously Presented) The method of claim 58, wherein the one or more acylases have a temperature optimum in the range of 25°C to about 75°C.

60. (Previously Presented) The method of claim 59, wherein the one or more acylases have a temperature optimum in the range of about 25°C to about 50°C.

61. (Cancelled)

62. (Cancelled)

63. (Cancelled)

64. (Cancelled)

65. (Currently Amended) The method of claim 34, wherein the composition contacting the surface with the effective amount of the one or more E.C. 3.5.1 acylases and the carrier further comprises one or more agents selected from the group consisting of dispersants, surfactants, detergents, other enzymes other than the one or more acylases, anti-microbials, and biocides.

66. (Currently Amended) The method of claim 65, wherein the other enzymes other than the one or more acylases are selected from the group consisting of an aminopeptidase, amylase, carbohydrase, carboxypeptidase, catalase, cellulase, chitinase, cutinase, cyclodextrin glycosyltransferase, deoxyribonuclease, esterase, alpha-galactosidase, beta-galactosidase, glucoamylase, alpha-glucosidase, beta-glucosidase, haloperoxidase, invertase, laccase, lipase, mannosidase, oxidase, pectinolytic enzyme pectinase, peptidoglutaminase, peroxidase, phytase, polyphenoloxidase, proteolytic enzyme protease, ribonuclease, transglutaminase, or xylanase.